

U. S. DISTRICT COURT  
WESTERN DISTRICT OF LOUISIANA  
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UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF LOUISIANA  
LAKE CHARLES DIVISION

**BROOKSHIRE BROTHERS  
HOLDING, INC., ET AL**

: DOCKET NO. 04-1150

VS.

: JUDGE TRIMBLE

**TOTAL CONTAINMENT, INC, ET AL**

: MAGISTRATE JUDGE WILSON

**MEMORANDUM RULING AND ORDER**

Before the Court are two motions: "Motion to Disqualify Charles Manning and Thomas Wenzel as Expert Witnesses, Alternatively, Motion to Exclude or Limit Their Testimony" (doc. #1026) filed by defendants, Dayco Products, LLC, Mark IV Industries, Ltd., Shell Chemical LP, Cleveland Tubing, Inc., and Commerce & Industry Insurance Company of Canada,<sup>1</sup> and "Travelers and Gulf Insurance Company's Motion to Exclude the Reports and Testimony of Plaintiffs' Experts Charles Manning and Thomas Wenzel" (doc. #1032). Travelers' motion incorporates by reference the arguments and reasoning set forth in the first motion (doc. # 1026).

Defendants maintain that neither Manning nor Wenzel are qualified to offer the anticipated testimony. Defendants further maintain that Manning and Wenzel's testimony is not reliable or relevant, and the probative value of their testimony is outweighed by the danger of unfair prejudice, confusion of the issues, and is misleading and cumulative. It is anticipated that Manning and Wenzel will testify that the Carilon layer (the inner most layer of the flexpipe) for the primary flexpipe became brittle while in service which made the flexpipe defective and not suitable for use as a

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<sup>1</sup> Commerce & Industry was dismissed with prejudice from the suit on July 18, 2007. See document #1193.

component of a fuel delivery hose. Defendants complain that (1) these experts are not qualified to render said opinion because they lack the specific education and experience, (2) their opinions are not reliable because they failed to take a scientific approach to their analysis, and (3) the experts' opinions are not relevant and are prejudicial.

Federal Rule of Evidence 702 provides the following regarding expert testimony:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

"The trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable."<sup>2</sup> The party offering expert testimony must prove by a preponderance of the evidence that the proffered evidence satisfies the criteria of Federal Rule of Evidence 702.<sup>3</sup> "The court must determine that the reasoning and methodology underlying the testimony is scientifically valid and that the reasoning and methodology can properly be applied to the facts in issue."<sup>4</sup> Rule 702 has three major requirements: (1) qualifications, (2) reliability, and (3) relevance.<sup>5</sup>

#### *Qualification*

The proponent of expert testimony bears the burden of establishing its admissibility.<sup>6</sup> "The

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<sup>2</sup> *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589 (1993).

<sup>3</sup> *Mathis v. Exxon Corp.*, 302 F.3d 448, 459-60 (5th Cir. 2002).

<sup>4</sup> *Allen v. Pennsylvania Engineering Corp.*, 102 F.3d 194, 196 (5th Cir. 1996) citing *Daubert*, 509 U.S. at 592-93.

<sup>5</sup> *Smith v. Fifthian*, 2006 U.S. Dist. LEXIS 51054, \*4-5 (W.D. La. July 26, 2006).

<sup>6</sup> *Mathis v. Exxon Corp.*, 302 F.3d 448, 460 (5th Cir. 2002).

burden of laying the proper foundation for the admission of the expert testimony is on the party offering the expert, and admissibility must be shown by a preponderance of the evidence.”<sup>7</sup> The fact that a proposed witness is an expert in one area, does not necessarily make that person qualified to testify as an expert in all related areas.<sup>8</sup>

Defendants argue that just because Manning and Wenzel are licensed professional engineers, that does not qualify them to offer testimony in this case. Specifically, Defendants complain that Manning has admitted that he has never designed or manufactured any type of hose, he is not an extrusion expert or an expert in polymer development. Also, he had never worked on a matter involving an aliphatic polyketone such as Carilon and he did not recall working on a project in the last five years where he has evaluated the ductile versus the brittle nature of a polymer.

Brookshire Brothers rebuts with the following: Dr. Manning has received degrees in mathematics and geology, metallurgical engineering and physics, and materials engineering and physics. He worked for NASA from 1958-1967 and was the Group Leader of the Failure Analysis and Reconstruction Laboratory. He was also a professor of Metallurgical and Materials Engineering at North Carolina State University where he continued his work performing failure analysis and accident reconstruction. His current company, Accident Reconstruction Analysis, Inc. (“ARAI”) performs failure analysis and accident reconstruction. Dr. Manning has been qualified in court in different areas pertaining to failure analysis and accident reconstruction. Dr. Manning has performed failure analysis on a number of hose and pipe failures including performing a failure analysis on a section of first generation TCI pipe in a previous case. He has performed many failure analyses on

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<sup>7</sup> *Allison v. McGhan Med. Corp.*, 184 F.3d 1300, 1306 (11<sup>th</sup> Cir. 1999).

<sup>8</sup> *Wilson v. Woods*, 163 F.3d 935, 937 (5th Cir. 1999).

reinforced hoses/pipes used for the conveyance of hydraulic and other fluids and has performed failure analysis of many polymeric materials including extensive analysis of polymeric material. The Court concludes that Dr. Manning is qualified to testify as a failure analyst concerning the Carilon inner layer.

Defendants maintain that Thomas Wenzel is not qualified because he has never been qualified as an expert in a court of law, he has no experience in the design and manufacture of hoses, and he acknowledges he has no expertise in aliphatic polyketones. Brookshire Brothers rebuts with the following: Wenzel is an employee of ARAI and worked with Dr. Manning on the failure analysis of the flexpipe in this case. He received a degree in Materials Science and Engineering, which incorporates metallurgy, ceramics and polymer science. Wenzel worked in the Advanced Materials and Test Group of the Government Aerospace Systems Division which included specifications of materials such as polymers for space structure and he also performed failure analysis of materials. Wenzel has worked for ARAI since 1991 where he performs failure analysis and accident reconstruction. He has a Masters' degree in Materials Science and Engineering and a minor in Mechanical Engineering. He has performed failure analysis of polymeric reinforced hoses and pipes during his career at ARAI. He also assisted Dr. Manning during his work performed on the TCI first generation hose. The Court concludes that Mr. Wenzel is qualified to testify as a failure analyst concerning the Carilon inner layer.

#### *Reliability*

Defendants maintain that these experts opinions are not reliable. *Daubert* lists five considerations to assist the trial judge in determining "reliability" of the expert's testimony: (1) the "testability of the expert's theory or technique; (2) whether the theory or technique has been subjected

to peer review and publication; (3) the known or potential rate of error; (4) the existence and maintenance of standards and controls; and (5) whether the methodology is generally accepted in the scientific community.”<sup>9</sup> Defendants complain that Manning and Wenzel failed to undertake the appropriate failure analysis, and they failed to follow the most basic scientific approach for failure analysis. Defendants further complain that these experts did not undergo a full consideration of the potential causes of the alleged failure of primary hoses, and they did not study the system or the environment upon which the hoses were subjected. Finally, Defendants complain that out of the 207 second generation hoses containing an inner core of Carilon that had been removed at the time Dr. Manning and Mr. Wenzel (collectively sometimes referred to as “ARAI”) issued their original report, they acknowledged that their conclusion about embrittled Carilon extended only to 88 hoses that exhibited a “blown out” cover and not to the other 119 hoses removed from service.

Brookshire Brothers maintains that Defendants’ allegations are blatantly false and makes the following rebuttal. ARAI initially visually observed cracks in the Carilon materials and examined the cracks using a stereo microscope which found the cracks brittle in appearance. Simple mechanical bending tests were performed on the Carilon, and ARAI concluded that the Carilon clearly exhibited a brittle failure. Scanning Electron Microscopy confirmed the brittle nature of the fractures. ARAI also utilized published literature regarding the embrittlement of plastics. While ARAI concludes that the brittleness of the Carilon is most likely the largest contributing factor of the failure of the hoses, the second report details other potential contributing factors. To support its position that Carilon embrittlement is the largest contributing factor, ARAI compares the first generation hose and the lack of evidence of leaks, with the second generation hose. While both the

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<sup>9</sup> *Daubert*, 509 U.S. at 591-95.

first and second generation TCI hose suffered from degradation of the outer hose layers, ARAI submits that all evidence indicates that only the second generation hose suffered from a significant number of actual fuel leaks through the hose. The only differences between the first generation hose and second generation hose was the inner liner material (Nylon changed to Carilon) and the outer cover. As to Defendants' complaint that ARAI did not study the system and its environment, Brookshire Brothers asserts that ARAI reviewed and considered a tremendous volume of materials produced by Dayco, TCI, Pump Masters and Cleveland Tubing which discussed problems with outer cover degradation, issues with water intrusion into sumps, issues with hydrolysis of outer layers in the hose, reasons for changing outer cover materials and inner liner materials, the purpose of each layer of the flexpipe, processing/manufacturing problems with the materials/pipe, and other topics associated with the design, installation and ongoing problems with the TCI first and second generation flexpipe. ARAI further submits that the second expert report details its analysis of the outer layers of the pipe including the reinforcement layers.

The Court concludes that Defendants' arguments lack merit. These issues go to the weight and credibility of the experts' opinions and testimony which shall be decided by a jury. As to the number of hoses that were found to have embrittled Carilon, Brookshire Brothers has the burden of proving to the jury causation and the amount of damages caused exclusively by an alleged defective inner layer composed of Carilon.

#### *Cumulative evidence*

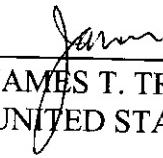
Defendants maintain that if Dr. Manning is allowed to testify, then Mr. Wenzel should not be allowed to testify because his testimony would provide cumulative evidence. The Court finds that this argument also lacks merit.

**ORDER**

For the reasons set forth above,

**IT IS ORDERED** that the motions in limine to exclude or limit the testimony of Dr. Charles Manning and Thomas Wenzel (docs. #1026 and 1032) are hereby **DENIED**.

THUS DONE AND SIGNED in Chambers at Lake Charles, Louisiana, this 5<sup>th</sup> day of September, 2007.

  
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JAMES T. TRIMBLE, JR.  
UNITED STATES DISTRICT JUDGE